

Annual Water Quality Report For the Year 2021



The City of North Bend (Public Water System ID#60100A) is pleased to provide you with its annual water quality report for the year 2021. The City strives to provide you with a safe and dependable supply of drinking water. We work diligently to provide top quality water to more than 6,600 consumers (about 2,800 connections) each day. We are pleased to report that our drinking water is safe and in compliance with all State & Federal Health Regulations. This report is a requirement of the United States Environmental Protection Agency and the Washington State Department of Health and explains the condition and quality of your drinking water.

The City of North Bend Has Two Water Sources

- Mt Si Spring – lying at the base of Mt Si, the spring has been the primary source of water for the City of North Bend
- Centennial Well – located on City property east of downtown North Bend, adjacent to the Public Works Shop

In addition to the water sources, the City maintains three reservoirs; the Nintendo Reservoir, a 2 million gallon capacity reservoir; the I-90 Reservoir, at 0.5 million gallon capacity; and the Forster Woods Reservoir, which holds 0.75 million gallons.

Information on the source water assessments is available from the Washington State Department of Health (DOH) website at [https://fortress.wa.gov/doh/ swap/](https://fortress.wa.gov/doh/swap/).

Understanding Water Contaminants

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the land surface or through the ground it dissolves naturally-occurring minerals and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses, parasites, and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife.

Inorganic contaminants, such as salts and metals, which can occur naturally or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, and farming.

Pesticides and herbicides, which may come from various sources such as agriculture, urban stormwater runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production. They can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive contaminants, which can occur naturally or result from oil and gas production and mining activities.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the ***EPA's Safe Drinking Water Hotline at 1-800-426-4791.***

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of North Bend is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at [**www.epa.gov/safewater/lead**](http://www.epa.gov/safewater/lead).

To ensure that tap water is safe to drink, the Department of Health and EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and the Washington Department of Agriculture regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Steps we take to prevent contamination

- **Cross-Connection Program/Backflow Prevention** – The City requires a backflow device to be connected to any potential connection between your drinking water pipes and a source of contamination such as irrigation systems.
- **Flushing—all dead-end water lines** - The Water Department engages in a schedule of maintenance to ensure water is not left to stagnate and flush the lines at least twice a year.
- **Well Head Protection Plan** in accordance with Comp Plan.
- **North Bend's Reservoirs are cleaned every 3-5 years as needed** - and repairs and maintenance are done to keep all our reservoirs in top shape.

The City performs testing based on a monitoring schedule determined by the Washington State Department of Health, and water quality results at the Mt. Si Spring and Centennial Well have always met compliance. Water treatment is achieved by disinfection with chlorine gas and liquid chlorine. To ensure that detectable disinfectant concentration is active in all parts of the distribution system, samples are collected and analyzed daily at ten strategic locations within the North Bend water service area. Additionally, the city is currently required to collect six bacteriological samples per month for the presence of E.Coli and fecal coliform. To date, all samples have tested satisfactorily.

The tables below list all of the drinking water contaminants we detected that are applicable for the year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in these tables are from testing done in 2021. The EPA or the state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants typically do not change.

Mt Si Spring

Contaminants	MCLG or MRDLG	SDRL	MCL, TT or MRDL	Results	Sample Date	Violation	Typical Sources
Antimony (mg/l)	6	0.0003	0.006	0.00034	2020	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Arsenic (mg/l)	10	0.0001	0.01	0.0068	2020	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Barium (mg/l)	2	0.0003	2	0.00030	2020	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Hardness (mg/l)	NA	10	NA	38	2020	No	Naturally occurring dissolved calcium and magnesium.
Nitrate (mg/l)	10	0.5	10	ND	2021	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite (mg/l)	10	0.1	1	ND	2021	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium (mg/l)	NA	0.2	NA	2.7	2020	No	Common element found in the environment and occurs widely in soils, plants, water, and foods.
Radium (pCi/L)	NA	NA	5	0.467	2016	No	Radioactive element found in the environment.
Turbidity (NTU)	NA	0.1	NA	0.21	2020	No	Cloudiness caused by particulate matter.

Centennial Well

Contaminants	MCLG or MRDLG	SDRL	MCL, TT or MRDL	Results	Sample Date	Violation	Typical Sources
Antimony (mg/l)	6	0.0003	0.006	ND	2020	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Arsenic (mg/l)	10	0.0001	0.01	0.0021	2020	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Barium (mg/l)	2	0.0003	2	0.00076	2020	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Hardness (mg/l)	NA	10	NA	88	2020	No	Naturally occurring dissolved calcium and magnesium.
Nitrate (mg/l)	10	0.5	10	ND	2021	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite (mg/l)	10	0.1	10	ND	2021	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium (ppm)	NA	0.2	NA	4.2	2020	No	Common element found in the environment and occurs widely in soils, plants, water, and foods.
Radium (pCi/L)	NA	NA	5	0.458	2016	No	Radioactive element found in the environment.
Turbidity (NTU)	NA	0.1	NA	0.33	2020	No	Cloudiness caused by particulate matter.

Distribution Monitoring

Contaminants	MCLG	MCL	AL	Results	Sample Date	# of Samples Exceeding the AL	Violation	Typical Sources
Asbestos (MFL)	7	7 MFL	NA	0.121	0.121	0	No	Decay of asbestos cement water mains; Erosion of natural deposits.
Lead – sample taken at consumers tap (ppb)	0	15	15	0.0015	2020	0	No	Corrosion of household plumbing systems; erosion of natural deposits.
Copper – sample taken at consumer's tap (ppm)	1.3	1.3	1.3	0.062	2020	0	No	Corrosion of household plumbing systems; Erosion of natural deposits.
Total Trihalomethanes [TTHM] (ug/L)	NA	80	NA	1.8	2021	0	No	Byproduct of drinking water disinfection.
Haloacetic Acids {HAA5} (ug/L)	NA	60	NA	<1	2021	0	No	Byproduct of drinking water disinfection.
Total Coliform	NA	NA	NA	present	2021	0	Yes*	Commonly found in the environment (soils and vegetation)

* On September 1, 2021 one of the six total coliform samples tested positive. The City re-tested at the same location as well as upstream and downstream locations the following day. These repeat samples had negative test results for total coliform and no further action was required or taken.

Important Drinking Water Definitions

MCLG	Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
MRDLG	Maximum Residual Disinfectant Level Goal: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
SDRL	State Detection Reporting Limit: The minimum reportable detection of an analyte.
MCL	Maximum Contaminant Level: This highest level of a contaminant that is allowed in drinking water. MCLs are set as close as feasible using the best available treatment technology.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
MRDL	Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
TTHM	Total trihalomethanes: By-product of drinking water disinfection
HAA5	Haloacetic Acids: By-product of drinking water disinfection

Data Table Key: Unit Descriptions

mg/L	number of milligrams of substance in one liter of water
ppm	parts per million, or milligrams per liter
ppb	parts per billion, or micrograms per liter
pCi/L	Picocuries per liter of air
Ug/L	Micrograms per liter or parts per billion
MFL	Millions of fiber per liter
ND	not detected
NA	not applicable
NTU	A measure of the clarity of water

The City of North Bend Water Department is working hard to keep your water clean!

If you have any questions or concerns about your water, please call the City of North Bend Water Department at 425-888-7655, or the Public Works Department at 425-888-0486

Still concerned? You can get more information about water contaminants and health risks by contacting the Washington State Department of Health – Division of Drinking Water at 360-236-3100 or at www.doh.wa.gov/Communityandenvironment/drinkingwater.com

or the US Environmental Protection Agency

Safe Drinking Water Hotline at 1-800-426-4791 or at www.epa.gov/ground-water-and-drinking-water.com

